NOTES ON MEDICAL EXAMINATION FOR LIFE ASSURANCE

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Medical examination for life assurance is not so easy as would appear at first sight.

It may be thought that all you have to do is to fill in the questions asked in the form. If you confine your work to this, the assurance company is often in doubt as to whether the candidate is a good life or otherwise. The fact is, a really good medical examination form has yet to be compiled. If it is simple, as is usually the case in England, something of importance is apt to be omitted. On the other hand, if the form is very comprehensive, as is the case with many American reports, the examiner gets weary with filling in the answers, and his clearness of vision as to the merits and demerits of the candidate is lessened.

That many medical examiners do not know their company's requirements, is evident to anyone who, like myself, has to examine many reports. In numerous cases the papers have to be sent back for "additional information." This entails delay and possibly annoyance. In the following pages I shall endeavour to note some of the main points in which a medical examiner can assist an assurance company in coming to a sound conclusion as to the life value of a candidate.

Before doing so, however, I will describe the procedure which is adopted in the office of one of the companies with which I am connected. This procedure has been in use for some years and works well.

When the medical report reaches head office, it is dealt with by the "digest clerks" who make a précis of the case on a "digest form."

This form is of foolscap size and is printed in duplicate in parallel columns. It is folded back to back down the centre. One clerk fills in one half and another the other half. The object of the folding is to conceal from the second clerk what the first has written, thus obviating bias of opinion.

At the bottom of each half sheet the clerks record their opinion: "Standard," "Substandard," "Decline," and so on. It is astonishing how well these digest clerks do their work, and what sound judgment they show after a little practice.

All the papers are then passed to a "lay" board, who check the digests against the medical reports. The "lay" board accepts on its own responsibility all cases which are obviously first-class lives, and in which the insurance applied for is not above £2,000. If there is any doubt about a case, or if the sum assured is more than £2,000, then, and then only, is it referred to the Medical Board.

By this means the Medical Board is relieved of the tedium of wading
through the reports on hundreds of straightforward cases, and is able to concentrate on those of difficulty.

The Medical Board consists of the secretary, the actuary and the medical officer. It might be thought that the opinion of the medical officer is all that matters, but it is not so. The actuary, who has statistics at his finger's ends, often gives most valuable advice, and the views of the secretary, who is well versed in the company procedure, are, of course, essential when it comes to the question of accepting a doubtful case.

I will now touch on a few points which strike me of importance in the compilation of the medical report.

**Occupation.**—This should be fully described. If a man is a salesman, state what he sells. It is essential to ascertain if the work he does is unhealthy or dangerous.

**Family History.**—The state of health of the family should be carefully considered, noting especially any tendency to hereditary diseases, such as tuberculosis, rheumatism or gout. If any of the family have died, ascertain the cause of death. Do not accept bronchitis, pneumonia, childbirth, as causes of death, until you have excluded tuberculosis as a possible factor.

"For what Diseases and from whom have you received Professional Assistance?"—In many cases the candidate will cheerily answer, "Never been ill in my life," and from his point of view he may be speaking the truth, for he associates illness with bed. It must be remembered, however, from an insurance point of view, that Nature's little ills, which may not be regarded by the layman as of much importance, produce perhaps, if long continued, a greater strain on the bodily machine than an acute illness. The best way, I find, is to work backwards. Ask the candidate when he last saw a doctor, and then, perhaps, he will remember that he has been under a physician on and off for some years for what he considers slight ailments not worth recording, such as dyspepsia, a bilious attack, catarrh, and so on. Now assurance companies do not, of necessity, regard such ailments as serious, but they want further information. For instance, to enter on the report, "suffers from dyspepsia," is not fair to the company or the candidate. You should ascertain the severity, frequency and duration of attacks, and, where possible, the cause.

Most companies ask, "Has he suffered from asthma?"—Asthma nearly always requires a rating. Make certain, however, that the asthma is not merely hay fever which, in England, is not looked upon as a serious complaint.

"Has he ever fainted or suffered from Palpitation?"—This requires consideration. Question him closely on these points, but do not record them against him if the cause be purely psychical. To take an extreme case. It would be absurd to report that a man has fainted on seeing someone else vaccinated. And yet some examiners will record such, or equally unimportant facts.

"Has he had Piles?"—At first sight this question seems of little value,
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but it requires an answer. The importance is, of course, that it may indicate a congested liver.

History of Fistula.—Details should be given, date of operation. Tuberculosis must be excluded.

"Has he had a Stricture?"—Go into details, ascertain if he has had to use a catheter.

"Has he had Gout?"—Go carefully into this question. If he has had a genuine attack of gout, the company will usually rate him up. Always ascertain number and severity of attacks.

"Has he had Rheumatism?"—Papers are constantly sent back to medical examiners on account of this question being insufficiently answered. The company wants to know if it was acute rheumatism, subacute rheumatism, rheumatoid arthritis, muscular rheumatism, septic arthritis and so on. Dates, frequency of attacks, duration of illness and whether the heart was affected should be stated.

"Has he ever had Malaria?"—Go into details. If possible ascertain type of malaria.

"Has he had a Discharge from the Ear?"—Ascertain date. Was it purulent? Was an operation performed? Go into present conditions. Is the hearing good in both ears.

A question often asked is, "Has he served in His Majesty's Forces?" If the answer is positive, ascertain where he served, whether in hospital and on account of what diseases. Was he gassed? Was he wounded? (Always examine for wound scars if this be the case.) In what category was he discharged? Is he drawing a pension, if so, for what disability? The great point is to ascertain if War Service has lessened, in any way, the value of his life.

"Are his Habits Active?"—Ascertain what game he plays. This gives a general idea as to his activity.

"What Quantity and what Kind of Stimulants does he Take?"—This question must be answered in detail. "One pint of beer at lunch," "one double whisky at dinner" and so on. Terms such as "moderate drinker" should be avoided. On the other hand, if he only has "a glass of port at Christmas," put him down as a teetotaller and have done with it. A commonsense answer is what is wanted.

The actual physical examination is comparatively simple to anyone accustomed to examining recruits or other candidates for public appointments. Under the heading of "Circulatory System," in addition to the presence or absence of murmurs, note any cardiac irregularity.

Make an "exercise tolerance test."

Blood Pressure.—Many English companies do not require bloodpressures to be taken, but the value of blood-pressure readings is recognized in America. Both the systolic and diastolic pressures should be recorded.

The following may be taken as normal blood-pressures from an insurance point of view:—
The figures I give here are only very rough guides. They are rather higher than the American tables, but I find that, in London at any rate, these pressures appear to be compatible with good lives, age for age.

A systolic blood-pressure under 100 millimetres points to a debilitated condition. Tuberculosis should be suspected. A systolic blood-pressure over 140 in the younger ages is certainly not normal. At no age should it exceed 150.

The diastolic blood-pressure varies comparatively little with age in health, but it does with ill-health. If above 100 it always requires a rating.

The pulse-pressure, i.e., the difference between the systolic and diastolic pressures, is important as it signifies the load that has to be borne by the heart. An ideal load is from forty to forty-five millimetres. As years go on, however, this becomes inevitably greater owing to the increase of the systolic pressure and the comparative stability of the diastolic pressure. A pulse-pressure between twenty-five millimetres and fifty millimetres may be regarded as normal. If much over fifty millimetres a rating will probably be required.

The following case illustrates the value of blood-pressure readings even in the younger ages:—

A clerk, aged 21, was sent to me for examination for insurance. He did not look fit though he was very muscular. He had an obsession for exercise. The only thing against him in his personal history was that on one occasion he had fainted at a cricket match. Physical examination revealed nothing abnormal beyond a slow pulse, 50 to 55 per minute. I took his blood-pressure, which I found, to my astonishment, to be 180/100. On a subsequent occasion it was higher still. He was sent to hospital and put through a searching examination. Nothing abnormal could be detected. He was placed on a simple diet and his exercise cut down considerably. As a result of this he is now feeling much better and his blood-pressure is gradually becoming more normal. His was evidently a case of simple hyperpiesis brought on by excess of food and exercise, but I should hesitate to recommend such a man for acceptance as a "first-class life," owing to the risk of eventual arteriosclerosis.

With regard to examination of the lungs. This is somewhat difficult: you are asked: "Are the lungs normal everywhere to percussion and auscultation, and do you, as a result of physical examination, detect any signs of consumption?" Be as conscientious as you may, you are bound to be deceived occasionally. On what do you base your findings? Is prolonged expiration at the right apex to be a cause for rejection? Surely not in an otherwise healthy individual, and yet such signs are not normal. The
absence of signs of active tuberculosis in the lungs is no criterion either. I had occasion a year or so ago to examine the reports of fifty-eight ex-officers who were under treatment as out-patients in a chest hospital. These officers all had tubercle bacilli in the sputum. In only sixty per cent were there physical signs of activity—an error of thirty-one per cent.

A short time ago I read the papers of a dental surgeon who had been passed by a conscientious man as a “first-class life,” some three months previously. The only thing against him was that he was ten per cent under weight. He was 40 years of age. Whilst at work in his consulting room he had a sudden haemorrhage from his lungs, which proved fatal. A post-mortem examination was made and he was found to have a large apical cavity in one of his lungs.

On the other hand, one can be too cautious. A man, aged 45, was rejected for insurance by a certain company. He happened to be a hospital patient of mine, so he came to see me and asked me if there was anything the matter with him. I gave him a very careful overhauling and could find nothing amiss. I recommended him to another company who accepted him as a “first-class life.” I was able to prove that though he had attended a consumptive hospital, he had no signs of tuberculosis, did not react to tuberculin, and had no skiagraphic abnormalities in his chest. The first company had rejected him, apparently, simply because he was a little below weight and had attended a hospital for tuberculosis. The correct procedure of the company in such a case would have been to apply to the hospital for additional information.

Digestive System.—Always note the condition of the teeth, tonsils, and so on. Note also if there be visceroptosis.

A word as to the examination of the urine. If you have an opportunity of communicating with the candidate, warn him against passing water for an hour or so before presenting himself for examination, otherwise he may not be able to do so on arrival.

Specific Gravity.—Some American companies, wisely, I think, insist on a specific gravity of 1016 or over. If the reading is lower than this, the candidate is required to furnish another sample at a later date.

With regard to sugar, I need hardly say that the Fehling solution must be perfectly fresh. Many medical men prefer Benedict’s solution, but I would advise an examiner in testing both for sugar and albumin, to use the tests to which he is accustomed. It is the technique rather than the chemical test used which is of importance.

Supposing you find sugar in an apparently healthy individual, bear in mind the possibility of renal glycosuria, and recommend that a “blood-sugar tolerance” test be made. Many companies now accept renal glycosuria with a lien.

With regard to albumin, companies vary in their attitude. The following procedure is adopted with two companies for whom I examine. If albumin be found on examination, two additional tests should be made and the urine should be sent to a laboratory for report. If no albumin is found in
these further tests, or if the laboratory reports that in the specimen the albumin is less than 0.0125 per cent, then the candidate is accepted.

The following mortality rates show the importance of albumin according to age:

From 15 to 24 = 104 or practically standard
25 ' 29 = 149
40 or over = 167

In other words, albumin is not to be regarded as of much importance in the younger ages, but is serious in later life.

It should be remembered, however, that albumin, at any rate, may signify a damaged kidney, and no case should be accepted as standard if the albumin be accompanied by a high blood-pressure. Some companies ask, "What expectation of life do you give the candidate?"

The expectation of life is as follows:

<table>
<thead>
<tr>
<th>Age</th>
<th>Expectation</th>
</tr>
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<tbody>
<tr>
<td>20</td>
<td>42 years</td>
</tr>
<tr>
<td>25</td>
<td>39 years</td>
</tr>
<tr>
<td>30</td>
<td>35 years</td>
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<tr>
<td>35</td>
<td>32 years</td>
</tr>
<tr>
<td>40</td>
<td>28 years</td>
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</tbody>
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but it should be remembered that these figures are for first-class lives.

At least eighty per cent of candidates for insurance come under the category, five per cent or less are uninsurable from obvious causes. The remainder are borderline cases. It is these borderline cases which are the difficult ones. Much assistance can be given to the company by the examining medical officer. The company desires your opinion as to prognosis. Consider therefore, carefully, not only any acute illnesses he may have had in the past, but also the minor ailments, such as dyspepsia, catarrh, and so on, which may point to underlying, though perhaps indefinite, ill health; a protuberant abdomen, increasing weight and a blood-pressure much above the normal, are all unfavourable signs, and so are very low blood pressures and light weights. Favourable as well as unfavourable features should be noted and remarks such as the following are very useful to head office:

"In spite of his being somewhat under weight, the candidate appears to be exceptionally healthy." "This man, though apparently conforming to standard as to weight, measurements, etc., is pale-looking and flabby."

In these days a great deal of assurance is done without any medical examination. The opinion of the private medical attendant is usually asked for in such cases and is sent direct by the doctor to the head office of the company. Assurance companies set great store by these reports, and if they are furnished by doctors who keep records of their cases they are of great value, but not so good, in my opinion, as a careful medical examination by an experienced medical officer who realizes the companies' requirements.

One last word. As a medical examiner you have nothing to do with the sum assured. Take as much trouble therefore, with a £100 case as you would with one insuring for £5,000 or more.